



U.S. Department of Education Green Ribbon Schools 2013

For Public Schools only: [] Charter [X] Title I [] Magnet [] Choice

Name of Principal Mrs. Kurt Benjamin
 (Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name Guion Creek Middle School
 (As it should appear in the official records)

School Mailing Address 4401 W. 52nd Street
 (If address is P.O. Box, also include street address.)

Indianapolis Indiana 46254
 City State Zip

County Marion State School Code Number* 5356

Telephone (317) 293-4549 Fax (317) 298-2794

Web site/URL www.pike.k12.in.us/schools/guion_creek_/Pages/default.aspx E-mail KBenjami@pike.k12.in.us

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

Kurt Benjamin Date 2/12/13
 (Principal's Signature)

Name of Superintendent* Mr. Nathaniel Jones
 (Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name* Metropolitan School District of Pike Township Tel. (317) 293-0393

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate. This is one of the highest performing green schools in my jurisdiction.

Nathaniel Jones Date 2/12/13
 (Superintendent's Signature)

*Private Schools: If the information requested is not applicable, write N/A in the space.



2012-2013 District Nominee Presentation Form

PART I - ELIGIBILITY CERTIFICATION

District's Certifications

The signatures of the district superintendent (or equivalent) on the next page certifies that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the superintendent's knowledge.

1. The district has been evaluated and selected from among districts within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
2. The district is providing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
3. OCR has not issued a violation letter of findings to the school district concluding that the nominated school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
4. The U.S. Department of Justice does not have a pending suit alleging that the school district has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
5. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the school district in question; or if there are such findings, the state or school district has corrected, or agreed to correct, the findings.
6. The district meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.



U.S. Department of Education Green Ribbon Schools 2013 – District Award

Name of Superintendent* Provided with the submission cover page attachment
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name* _____ Tel.(____) _____

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

(Superintendent's Signature) Date _____

PART II – SUMMARY OF ACHIEVEMENTS

Instructions to District Superintendent

Provide a concise and coherent "snapshot" that describes how your district is representative of your jurisdiction's highest achieving green school efforts in approximately 800 words. Summarize your strengths and accomplishments. Focus on what makes your district worthy of the U.S. Department of Education Green Ribbon School District Award.

PART III – DOCUMENTATION OF STATE EVALUATION OF DISTRICT NOMINEE

Instructions to Nominating Authority

The Nominating Authority must document the district's high achievement in each of the three ED-GRS Pillars and nine Elements. Please attach documentation in each Pillar and Element. This may be the Authority's application based on the Framework and sample application or a committee's written evaluation of a school in each Pillar and Element.

Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the district's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The district is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.



2. The district meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency _____ Indiana Department of Education _____

Name of Nominating Authority: Mr. Jeremy Eltz
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the district meets the provisions above.

 _____ Date 2/15/2013 _____
(Nominating Authority's Signature)

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509
Expiration Date: February 28, 2015

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.



METROPOLITAN SCHOOL DISTRICT OF PIKE TOWNSHIP

Facilities and Maintenance Department

3950 W. 56th Street, Indianapolis, IN 46254

Phone: 317-280-2400 Fax: 317-298-2708

Raul Rivas
Director of Facilities

Guion Creek Middle School Green Ribbon Application November 30, 2012

It is a pleasure to submit Guion Creek Middle School for recognition as a Green Ribbon School. For the past two years the school district made a major financial commitment to convert the school to a geothermal heat pump system to include 140 vertical wells, and to participate in the *Pike On the Move* grant sponsored by the U.S. Department of Education.

The advantages of converting Guion Creek Middle School to geothermal include:

- Reduction in energy – we have lowered substantially our natural gas use and have earned a reduction in electrical use.
- Lower maintenance costs and more time for maintenance staff to focus on other needs in the building.
- The elimination of boilers, chillers and cooling towers – significant annual savings.
- Discontinue using chemicals to treat the loop system – another major cost we no longer have.
- Easy access to equipment – heat pumps are accessible and easy to change out.
- Heat recovery for fresh air from exhaust – important to note that we also filter the air.
- Clean operating system and no CO₂ emissions – we are doing our part to protect the environment
- Reduction in greenhouse effect with discontinued use of traditional HVAC system.

Guion Creek Middle School, in collaboration with the Facilities Department, has improved the health of all students and staff. Not only do we have a geothermal heat pump system proving comfort, but also the school participates in the *Pike On the Move* grant and the Integrated Pest Management program. The *Pike On the Move* grant enables Guion Creek Middle School staff to focus on goals to increase the physical and cardiovascular fitness and nutrition of students, parents, families and the community. Students are assessed for body fat to establish a baseline, issued pedometers to wear throughout the school year, plant vegetable gardens, harvest the vegetables to be consumed in the cafeteria, and will be able to work out in a fitness room that is currently under construction. Finally, under the *Integrated Pest Management* program, pesticides are not used in our schools unless it is absolutely necessary, i.e. termites. The school is inspected for cleanliness on a regular basis, and the staff is consulted when there is a pest issue. The Facilities Department offers workshops, educational literature and best practices in keeping Guion Creek Middle School pesticide free.

Guion Creek Middle School is fortunate to be able to participate in the three-year *Pike On the Move Grant* sponsored by the U.S. Department of Education. Funds are allocated for fitness, nutrition, and wellness. What is exceptional about the grant is the implementation of programming that addresses sustainability by having the school grow vegetables in six large 4' x 8' containers. The vegetables are harvested and served as part of the lunch menu in the school cafeteria. What better way for students to nurture plants on school

property and consume the fruits of their labor. The teaching staff seeks to nurture and sustain a cultural shift that produces systemic change, resulting in healthy eating and fitness for all students.

The Guion Creek Middle School garden program is a unique program for the school. It has allowed students to interface with the Food Services Department in preparing vegetables for consumption in the school cafeteria that were grown at the back of the school. Second, eighth graders participate in recycling at the school by sorting paper, cans and plastic. Funds generated by recycling efforts are given back to the school.

Guion Creek Middle School has been identified by the *Pike On the Move* grant as a school in need. It has been given the opportunity to partner with a host of universities and government organizations. The outcome of this collaboration is a comprehensive professional development program with goals that include increasing teacher competency in math and science content knowledge; utilizing research-based practices; delivering high quality math and science inquiry instruction through relevant STEM integration, alignment with corresponding math, science, and literacy standards. The student outcome goal and the primary benefit of the program is to increase the number of students in grades 4 – 8 who pass the statewide test (ISTEP) in math and science. Organizations that are supporting the school include Butler, Purdue and Marian Universities, the Institute of Electrical & Electronics Engineers, the United States Geological Survey (Indiana Water Science Center), the Indiana Department of Natural Resources (Forestry Division), NOAA National Weather Service, the Pike Township Educational Foundation, Pike Classroom Teachers Association and the MSD of Pike Township Board of Education.

In closing, the application process allowed us to interact with different departments within the Metropolitan School District of Pike Township, Rays Trash Service, and Citizens Energy. It is important to note how interconnected we all are in protecting the environment. It has provided us with a greater appreciation of the work being done by students, staff, parents, the community and vendors. Everyone has a vested interest in making our environment a better place now and in the future.



Indiana Department of Education

Glenda Ritz, NBCT

Indiana Superintendent of Public Instruction

Please accept the following evidence and evaluation as support of Guion Creek Middle School, in Indianapolis, IN receiving the Green Ribbon Schools Award. Guion Creek Middle School will represent Indiana as our lone nomination for the award and also represents a disadvantaged school with over 73% of their students receiving free or reduced lunch. This school has shown exemplary progress in the three pillars:

Pillar I: Reduce environmental impact and costs

Energy

- Received award from the US EPA for reducing risks from pests and pesticides through the implementation of Integrated Pest Management. School no longer uses harmful pesticides on its property or in its buildings.
- Has shown a reduction of 17.9% in Greenhouse Gas emissions
- Reduced its non-transportation energy use by 50% from 11/11-10/12
- Installed a geothermal heat pump system that produces renewable energy, providing 45% of its energy uses
- Partnered with Co-Alliance to receive discounted crude oil, refined using local products

Water and Grounds

- Reduced water usage by 40.9% per occupant
- 95% of the property is considered water-efficient, the only irrigated land is the football field and this is done to prevent injuries
- All waterlines have backflow check valves to ensure that chemicals don't contaminate the water supply, these are maintained annually
- To ensure lead is kept from the drinking water, water lines use crimp fittings and no longer allow the use of soldering copper piping
- 85% of the school property is used by students and teachers and many teachers have indicated they use the property to have students explore how human activity has affected the biosphere

Waste

- 25% of solid waste is diverted from landfill by recycling
- 100% of the schools paper content is chlorine free
- Only hazardous waste is diesel fuel, 5 gallons per week for mowing
- School has contracted with a local trash service to recycle paper, cardboard, cans, and plastics
- Contracted with Abitibi Bowater to recycle newspapers, cans, and plastics for the community, providing a 24 hour drop off
- Integrated Pest Management system prevents pesticide waste
- Uses Buckeye International Cleaning products that meet the Green Seal Standard for cleaning products for 100% of its cleaning products
- School has a no idling policy applied to all vehicles including school buses and loading and unloading zones are at least 25 feet from buildings
- Installed crank case ventilation systems on every bus to help clean air
- All oil is recycled and used as a source of energy to heat the bus wash
- All batteries, antifreeze, and scrap steel are recycled

200 W. Washington Street ■ Indianapolis, Indiana 46204

317.232.6665 ■ www.doe.in.gov



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Indiana Superintendent of Public Instruction

Pillar II: Improve the health and wellness of students and staff

Environmental Health

- Participates in an Integrated Pest Management program and no longer uses any pesticides within the school, pest are taken care of by staff certified by the Indiana State Board of Chemists
- Kept clean by using green products and messes are immediately cleaned with soap and water to prevent pests
- Smoking is prohibited on all school grounds and school sponsored events
- Identified sources of mercury and has prohibits its purchase. School removed rubber flooring in gyms that contained mercury and disposed of the floor following EPA standards
- Does not have fuel burning combustion appliances, food is reheated in combi-ovens and food is no longer prepared in fat, oil, or grease.
- Director of Facilities implemented a chemical storage policy in 2007 for the management of chemicals.
 - No longer are large quantities of chemicals kept on campus, products are ordered as needed
 - Paint and chemicals are stored in specially colored containers
 - Staff are no longer permitted to bring any type of chemical from home
 - All cleaning supplies are green products
- Director of Facilities regularly communicates with teachers, administrators, and students about maintaining the cleanliness of the school and proper storage of chemicals in order to reduce asthma triggers
 - Includes staff development for custodians to educate them on asthma
- To control for leaks, condensation, mold, etc. school has done substantial remodeling including
 - Roof restoration
 - Converting to geothermal heating and cooling
 - Replacing all temperature controls
 - Regular HVAC inspections
 - Temperature control management system contain alarms for leaks and condensation issues
 - Dedicated employee 24/7 to facility emergencies
- Installed local exhaust systems for airborne contaminants
 - Geothermal heat pumps are in each room allowing the building to be sectioned off and for efficient delivery of fresh air
 - Filters are changed regularly
- HVAC filters are changed by the same contractor for over 10 years
 - Duct detectors alert HVAC team of any issues with ventilation, messages are sent directly to cell phone
- 3 times a year the building is inspected by the Director of Facilities and the energy manager in accordance with EPA guidelines they cover all areas of the building and address concerns immediately
 - Every morning, 6:00 AM, mechanical systems are analyzed by the temperature control software and deficiencies are corrected prior to students arriving
 - CO₂ levels are checked mid-day
 - All software and alert systems are regularly updated and maintained



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Nutrition and Fitness

- Participates in USDA's Healthier US School Challenge and were Bronze in 2012
 - In the process of becoming a certified USDA HealthierUS School
- Has an on-site food garden and vegetables were placed on the lunch menu, items included cucumbers, tomatoes, pumpkins, and zucchini
- Students spent at least 120 minutes per week in supervised physical education
 - Currently participating in an physical education grant and it referred to locally as "Pike on the Move"
 - Goal is to increase student daily activity by 60 minutes
- Health measures are integrated into assessments through the Carol M. White Physical Education Grant, "Pike on the Move"
 - To increase physical fitness of students in grades 4 – 10 by increasing their daily physical activity to 60 minutes.
 - To increase cardio-vascular fitness levels of students in grades 4-10, by increasing daily physical activity and improving nutrition.
 - To improve the nutrition of students in grades 4-10, by increasing their daily intake of fruits and vegetables.
 - To improve the nutrition and fitness of students in grades 4-10, by involving parents/families and the community.
 - To improve instructional practices in teachers (grades 4-10) in nutrition, fitness, adapted PE, and wellness, through targeted professional development/training. Measurements include establishing a baseline to include measurement through the use of a pedometer use, shuttle run, and BMI.
- Food purchased by the school is certified as environmentally preferable
- A wide variety of athletics are offered at the school and currently a fitness center for students is being constructed and opening this spring. In addition the following programs have been implemented for student and staff health:
 - The school partners with the Indianapolis Colts and offers the Colts Fitness Camp to all students.
 - Teachers are offered opportunities to participate in district sponsored nutrition workshops.
 - The school has access to a Program Nutrition Manager to coordinate and implement programming at the school.
 - The school has access to a Program Fitness Manager to oversee the development of a fitness room at the school.
 - Pedometers are provided to every student in the school.
 - The school's Athletic Director serves on the district Wellness Committee.
 - A salad/fruit bar station has been purchased for the school.



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Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways

- School has an environmental or sustainability literacy requirement
 - By 8th grade students should be able to articulate how human activities have changes land, water, and atmosphere and what humans need to do to sustain a health environment
- Environmental and sustainability concepts are integrated into the curriculum
 - 6th grade has emphasis on studying the relationships between organisms, habitat, biotic factors, photosynthesis, and the food cycle
 - 7th grade students learn how water is a major component in sustaining all organisms, they examine the relationships between plant and animal, and student venture outside onto the school grounds to validate what they have discovered in the classroom
 - 8th grade students put it all together identifying how human activities effect the biosphere
 - To encourage further study, a science club has started this year, allowing students to experiment and participate in more activities promoting sustainability
- Environmental and sustainability concepts are integrated into assessments
 - 6th grade students choose biotic or abiotic projects and demonstrate how each one limits an ecosystem
 - Students participate in nature walks to spur conversation and debate about what every person needs to do to protect the environment
- Professional development in environmental and sustainability education are provided
 - Pike on the Move grant allowed Pike schools to partner with Butler University to provide 2 weeks of summer professional development
- School addresses sustainability through a school garden in which all produce is used in the school cafeteria, the science teachers are the ones who run this program
- Students have participated in learning about green technologies by observing and learning about the geothermal system the school installed, experiencing green technology first hand. This installation provided the teachers with a relevant topic to introduce green technologies and they expanded on this by discussing other technologies such as windmills.
 - 8th grade students participate in Career Day on Green Technology. Speakers are brought in for students to interview and learn about career opportunities in green technologies. This day also includes assessments and career planning.
- Students participate in community engagement through the school garden as well as the schools recycling program
- 6th through 8th grade students participate in planting seeds and harvesting the produce. In addition students participate in caring for the school grounds and cleaning up the environment
- Language arts classes take students outside to work on environmental poetry
- Partnerships include to achieve the 3 pillars include
 - Butler University
 - Marian University
 - Institute of Electrical and Electronics Engineers



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- USGS
- Indiana Department of Natural Resources
- NOAA
- Pike Township Educational Foundation
- Pike Classroom Teachers Association
- MSD of Pike Township Board of Education
- Engineers who designed the geothermal well field heat pump system will provide presentations for classrooms to teach students the geothermal systems are clean systems producing no CO₂ emissions
- Finally, it is the goal of Guion Creek Middle School to have students share with the community that they are doing their part to protect the environment